

## CLAIMS

1. A method for processing a digitally captured image that comprises an imaged document, said method comprising:
  - transforming said digitally captured image into a binary image;
  - searching said binary image to detect a plurality of edges of said imaged document; and
  - analyzing said detected plurality of edges to determine at least one corner associated with said imaged document;wherein said transforming, searching, and analyzing are performed by programmable logic associated with a processor-based system.
2. The method of claim 1 further comprising:
  - performing perspective adjustment utilizing said determined at least one corner.
3. The method of claim 1 wherein said transforming comprises:
  - determining a luminance threshold associated with said digital image.
4. The method of claim 3 wherein a pixel of said binary image equals: (1) a logical value of one when a corresponding pixel in said digitally captured image is associated with a value greater than said luminance threshold; or (2) a logical value of zero otherwise.
5. The method of claim 1 wherein said analyzing comprises:
  - analyzing a respective magnitude of slope associated with each of said plurality of edges.
6. The method of claim 1 wherein said analyzing comprises:
  - searching for a turning point in each of said plurality of edges.
7. The method of claim 6 wherein said analyzing comprises:
  - assigning detected turning points as ones of a plurality of corners.

8. The method of claim 1 wherein said analyzing comprises:  
averaging locations associated with end points of ones of said plurality of edges to  
determine ones of a plurality of corners.

9. A system for processing a digitally captured image that comprises an imaged  
document, said system comprising:

means for transforming said digitally captured image into a binary image;  
means for detecting edges of said imaged document from said binary image; and  
means for estimating at least one corner location of said imaged document from said  
detected edges.

10. The system of claim 9 further comprising:  
means for performing perspective enhancement of said image document utilizing said at  
least one estimated corner location.

11. The system of claim 9 wherein said means for transforming is operable to  
calculate a luminance threshold of said digitally captured image.

12. The system of claim 9 wherein said means for transforming is operable to assign a  
logical value of one to a pixel of said binary image that corresponds to a pixel of said digitally  
captured image that is associated with a value greater than said luminance threshold and is  
operable to assign a logical value of zero otherwise.

13. The system of claim 11 wherein said means for transforming is operable to  
construct a histogram of luminance values of said digitally captured image to determine said  
luminance threshold.

14. The system of claim 9 wherein said means for estimating is operable to analyze  
said detected edges to identify turning points wherein said turning points are associated with a  
change in slope sign of said detected edges with respect to said binary image.

15. The system of claim 14 wherein said means for estimating utilizes detected turning points as corner locations.

16. The system of claim 9 wherein said system is selected from the group consisting of: a personal computer, a personal digital assistant (PDA) and a digital camera.

17. A computer-readable medium comprising executable instructions for processing a digitally captured image that comprises an imaged document, said computer-readable medium comprising:

code for applying a luminance threshold to said digitally captured image to construct a binary image;

code for detecting edges of said imaged document from said binary image, wherein said code for detecting is operable to search from each respective margin of said binary image for a change in value in said binary image to detect said edges; and

code for determining at least one of corner location from said detected edges.

18. The computer-readable medium of claim 17 further comprising:

code for performing perspective enhancement of said imaged document utilizing said determined at least corner location.

19. The computer-readable medium of claim 17 wherein said code for determining is operable to analyze said detected edges for points associated with a change in sign of slope with respect to said binary image.

20. The computer-readable medium of claim 19 wherein said points associated with a change in sign of slope are utilized as corner locations.